

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	17	65 ?	?	?	?	?	?	?	?	?	?	41	0	0	0	0	0	0	123 ?
2	0	0	0	0	0	0	12	73 ?	290 ?	285	339	403	?	410 ?	243	104	40	9	0	0	0	0	0	0	2209 ?
3	0	0	0	0	0	0	18	64 ?	?	?	?	?	?	?	?	?	?	46	0	0	0	0	0	0	128 ?
4	0	0	0	0	0	0	21	70	193	?	?	?	?	?	?	?	112 ?	32	0	0	0	0	0	0	428 ?
5	0	0	0	0	0	0	10	68 ?	?	282 ?	428 ?	?	?	?	?	246	112	33	0	0	0	0	0	0	1179 ?
6	0	0	0	0	0	0	12	106	175 ?	307 ?	261	128	54 ?	?	62	80	100	24	0	0	0	0	0	0	1310 ?
7	0	0	0	0	0	0	16	108 ?	250 ?	?	?	?	?	?	?	?	182 ?	47	0	0	0	0	0	0	604 ?
8	0	0	0	0	0	0	15	78 ?	?	?	?	?	275 ?	293	288 ?	140 ?	105	55	3	0	0	0	0	0	1254 ?
9	0	0	0	0	0	0	15	84	?	?	?	322 ?	?	?	287 ?	262 ?	?	43 ?	3	0	0	0	0	0	1015 ?
10	0	0	0	0	0	0	6	17 ?	37 ?	80	166	98	121	138	111	79	41	10	2	0	0	0	0	0	905
11	0	0	0	0	0	0	26	86 ?	?	?	?	?	?	?	?	?	?	54 ?	2	0	0	0	0	0	167 ?
12	0	0	0	0	0	0	27	93 ?	?	?	?	?	?	?	?	?	?	59 ?	3	0	0	0	0	0	182 ?
13	0	0	0	0	0	0	28	86 ?	?	?	?	?	?	?	?	?	?	44 ?	8	0	0	0	0	0	166 ?
14	0	0	0	0	0	0	21	98	177 ?	377 ?	?	?	?	489 ?	314 ?	?	?	51 ?	3	0	0	0	0	0	1531 ?
15	0	0	0	0	0	0	3	12 ?	55 ?	92	112	148	147	107	151	249	113	10 ?	4	0	0	0	0	0	1202 ?
16	0	0	0	0	0	0	4	?	38 ?	52 ?	79	64 ?	70	66	65	70	58	21	17	0	0	0	0	0	606 ?
17	0	0	0	0	0	0	6	75 ?	127	204	202	227	154	166	87	57	34 ?	2 ?	0	0	0	0	0	0	1341 ?
18	0	0	0	0	0	0	46	106	237 ?	?	?	?	443 ?	261	261	171	35 ?	9	0	0	0	0	0	0	1569 ?
19	0	0	0	0	0	0	34	119 ?	?	?	?	?	?	?	?	?	?	59 ?	10	0	0	0	0	0	222 ?
20	0	0	0	0	0	0	47	?	?	?	?	?	?	?	?	?	?	57 ?	6	0	0	0	0	0	110 ?
21	0	0	0	0	0	0	18	39	76	66 ?	116	325	444 ?	?	?	?	161 ?	61	5	0	0	0	0	0	1311 ?
22	0	0	0	0	0	0	50	141 ?	?	?	?	?	437 ?	402 ?	315 ?	234 ?	169 ?	53	13	0	0	0	0	0	1814 ?
23	0	0	0	0	0	0	42	?	?	?	?	?	?	?	?	?	?	73 ?	13	0	0	0	0	0	128 ?
24	0	0	0	0	0	0	40	?	?	?	?	?	?	?	?	?	?	75 ?	17	0	0	0	0	0	131 ?
25	0	0	0	0	0	0	44	?	?	?	?	?	?	?	?	?	?	60 ?	8	0	0	0	0	0	112 ?
26	0	0	0	0	0	0	49	119 ?	?	?	?	?	?	?	?	?	?	82 ?	16	0	0	0	0	0	265 ?
27	0	0	0	0	0	1	38	?	?	?	?	512 ?	?	386	314	305 ?	103	39	7	0	0	0	0	0	1706 ?
28	0	0	0	0	0	1	24	121	276 ?	347 ?	550 ?	498	455 ?	208	129	71	53	28	10	0	0	0	0	0	2770 ?
29	0	0	0	0	0	1	13	48	105	142	198	275	344	339	274	154	71	26	4	0	0	0	0	0	1994
30	0	0	0	0	0	1	11	74	184	248	305	332	283	305	239	169	98	32	5	0	0	0	0	0	2288
31	0	0	0	0	0	1	14	41	51 ?	?	66 ?	87 ?	300	349	365	295	?	37 ?	4	0	0	0	0	0	1611 ?
Avg	0	0	0	0	0	0	23	80	152	207	235	263	271	280	219	168	93	41	5	0	0	0	0	0	980 ?
S D	0	0	0	0	0	0	14	32	88	116	148	153	149	127	101	87	47	21	5	0	0	0	0	0	781
S/A	0	0	0	0	0	2.43	0.62	0.4	0.58	0.56	0.63	0.58	0.55	0.45	0.46	0.52	0.51	0.51	1.02	0	0	0	0	0	0.8
Min	0	0	0	0	0	0	3	12	37	52	66	64	54	66	62	57	34	2	0	0	0	0	0	0	110
Max	0	0	0	0	0	1	50	141	290	377	550	512	455	489	365	305	182	82	17	0	0	0	0	0	2770
n	0	0	0	0	0	7	283	195	111	100	123	120	110	141	163	165	156	301	62	0	0	0	0	0	2052

Daylight Data Recovery: 0.0% missing; 53.8% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25823F3 Calibration Factor: 9.830 $\mu\text{V}/\text{W}/\text{m}^2$ Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Instrument: Eppley NIP
Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	1	1?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	1?
2	0	0	0	0	0	0	0	0?	0?	0	0	0	?	0?	0	0	0	0	0	0	0	0	0	0	0?
3	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0?
4	0	0	0	0	0	0	0	0	0	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0?
5	0	0	0	0	0	0	0	0?	?	0?	0?	?	?	?	?	0	0	0	0	0	0	0	0	0	0?
6	0	0	0	0	0	0	0	0	0?	0?	0	0	0	?	1	1	0	0	0	0	0	0	0	0	2
7	0	0	0	0	0	0	0	0?	0?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0?
8	0	0	0	0	0	0	1	0?	?	?	?	?	0?	0	0?	0?	0	0	0	0	0	0	0	0	1?
9	0	0	0	0	0	0	0	1	1?	?	?	0?	?	0?	0?	0?	?	0?	0	0	0	0	0	0	2?
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
12	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
13	0	0	0	0	0	0	1	1?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	2?
14	0	0	0	0	0	0	0	1	0?	0?	0?	?	?	0?	0?	?	?	0?	0	0	0	0	0	0	1?
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18	0	0	0	0	0	0	1	0	1?	?	?	?	0?	0	0	0	0	0	0	0	0	0	0	0	2?
19	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
20	0	0	0	0	0	0	1	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	1?
21	0	0	0	0	0	0	0	0	0	0	1	0	0?	?	?	?	0?	0	0	0	0	0	0	0	2?
22	0	0	0	0	0	0	0	0?	?	?	?	?	0?	0?	0?	0?	0?	0	0	0	0	0	0	0	1?
23	0	0	0	0	0	0	0	1	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	1?
24	0	0	0	0	0	0	1	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	1?
25	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
26	0	0	0	0	0	0	1	0?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	1?
27	0	0	0	0	0	0	0	?	?	?	?	0?	?	0	0	0	0	0	0	0	0	0	0	0	0?
28	0	0	0	0	0	0	0	0	0?	0?	0?	0	0?	0	0	0	0	0	0	0	0	0	0	0	0?
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0?	0	0	0	0	0	0	0?
Avg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1?
SD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
S/A	0	0	0	0	0	4.91	1.18	1.41	2.08	2.01	2.45	2.3	1.97	2.16	3.03	2.2	2.67	2.57	5.57	0	0	0	0	0	0.78
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	2
n	0	0	0	0	0	7	283	227	142	125	132	135	120	159	165	168	174	315	62	0	0	0	0	0	2227

Daylight Data Recovery: 0.0% missing; 49.9% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25519E6 Calibration Factor: 7.533 $\mu\text{V}/\text{W}/\text{m}^2$ Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	14	34 ?	?	?	?	?	?	?	?	?	?	21	0	0	0	0	0	0	68 ?
2	0	0	0	0	0	0	13	47 ?	220 ?	264	317	378	?	335 ?	246	109	42	10	0	0	0	0	0	0	1981 ?
3	0	0	0	0	0	0	19	46 ?	?	?	?	?	?	?	?	?	?	25	0	0	0	0	0	0	90 ?
4	0	0	0	0	0	0	25	67	165	?	?	?	?	?	?	?	79 ?	32	0	0	0	0	0	0	368 ?
5	0	0	0	0	0	0	10	62 ?	?	236 ?	344 ?	?	?	?	?	223	117	34	0	0	0	0	0	0	1026 ?
6	0	0	0	0	0	0	15	88	152 ?	273 ?	251	133	51 ?	34 ?	65	87	102	25	0	0	0	0	0	0	1275 ?
7	0	0	0	0	0	0	15	81 ?	205 ?	?	?	?	?	?	?	?	160 ?	34	0	0	0	0	0	0	495 ?
8	0	0	0	0	0	0	14	29 ?	?	?	?	?	239 ?	285	255 ?	138 ?	101	37	4	0	0	0	0	0	1102 ?
9	0	0	0	0	0	0	16	86	132 ?	?	?	205 ?	?	350 ?	271 ?	256 ?	?	25 ?	3	0	0	0	0	0	1343 ?
10	0	0	0	0	0	0	6	18	28	86	177	105	129	148	118	85	43	11	2	0	0	0	0	0	956
11	0	0	0	0	0	0	17	32 ?	?	?	?	?	?	?	?	?	?	21 ?	2	0	0	0	0	0	72 ?
12	0	0	0	0	0	0	14	30 ?	?	?	?	?	?	?	?	?	?	18 ?	2	0	0	0	0	0	64 ?
13	0	0	0	0	0	0	18	34 ?	?	?	?	?	?	?	?	?	?	29 ?	7	0	0	0	0	0	89 ?
14	0	0	0	0	0	0	24	98	162 ?	311 ?	361 ?	?	?	387 ?	245 ?	?	?	31 ?	3	0	0	0	0	0	1623 ?
15	0	0	0	0	0	0	3	13 ?	54 ?	98	118	155	154	112	158	249	115	11	5	0	0	0	0	0	1246
16	0	0	0	0	0	0	4	11 ?	33	51	83	49 ?	72	67	67	74	61	22	?	0	0	0	0	0	596
17	0	0	0	0	0	0	7	59	131	203	211	236	163	174	92	60	26	2 ?	0	0	0	0	0	0	1364
18	0	0	0	0	0	0	32	107	207 ?	?	?	?	345 ?	270	268	177	31 ?	11	0	0	0	0	0	0	1448 ?
19	0	0	0	0	0	0	28	72 ?	?	?	?	?	?	?	?	?	?	25 ?	7	0	0	0	0	0	132 ?
20	0	0	0	0	0	0	23	?	?	?	?	?	?	?	?	?	?	27 ?	6	0	0	0	0	0	56 ?
21	0	0	0	0	0	0	19	36	71	49 ?	126	293	378 ?	?	?	?	?	125 ?	60	5	0	0	0	0	1161 ?
22	0	0	0	0	0	0	32	97 ?	?	?	?	?	332 ?	331 ?	297 ?	227 ?	134 ?	46	9	0	0	0	0	0	1506 ?
23	0	0	0	0	0	0	21	?	?	?	?	?	?	?	?	?	?	24 ?	7	0	0	0	0	0	52 ?
24	0	0	0	0	0	0	23	?	?	?	?	?	?	?	?	?	?	43 ?	12	0	0	0	0	0	78 ?
25	0	0	0	0	0	0	35	?	?	?	?	?	?	?	?	?	?	26 ?	6	0	0	0	0	0	67 ?
26	0	0	0	0	0	0	39	94 ?	?	?	?	?	?	?	?	?	?	61 ?	14	0	0	0	0	0	208 ?
27	0	0	0	0	0	?	25	?	?	?	?	390 ?	?	355	309	252	97	34	8	0	0	0	0	0	1468 ?
28	0	0	0	0	0	0	24	112	247 ?	292 ?	483 ?	473	420 ?	212	132	73	54	29	10	0	0	0	0	0	2561 ?
29	0	0	0	0	0	1	13	49	108	146	203	282	350	344	277	158	73	26	4	0	0	0	0	0	2035
30	0	0	0	0	0	1 ?	12	76	188	254	313	340	290	313	245	173	101	33	5	0	0	0	0	0	2343
31	0	0	0	0	0	1 ?	15	40	44	40 ?	61	73	277	356	364	291	?	33 ?	5	0	0	0	0	0	1599 ?
Avg	0	0	0	0	0	0	19	58	134	177	235	239	246	255	213	164	86	28	4	0	0	0	0	0	919 ?
S D	0	0	0	0	0	0	9	30	71	102	125	133	121	114	93	77	39	13	4	0	0	0	0	0	772
S/A	0	0	0	0	0	2.89	0.48	0.52	0.53	0.58	0.53	0.56	0.49	0.45	0.44	0.47	0.45	0.47	0.93	0	0	0	0	0	0.84
Min	0	0	0	0	0	0	3	11	28	40	61	49	51	34	65	60	26	2	0	0	0	0	0	0	52
Max	0	0	0	0	0	1	39	112	247	311	483	473	420	387	364	291	160	61	14	0	0	0	0	0	2561
n	0	0	0	0	0	4	269	213	133	117	130	132	116	154	165	168	165	311	60	0	0	0	0	0	2150

Daylight Data Recovery: 0.0% missing; 51.6% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25819F3 Calibration Factor: 9.070 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Dry Bulb Temperature (Tower)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Degrees Celsius

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	10.3	9.5	8.6	7.9	7.7	7	6.9	7.3	9.6	13	15.7	17.3	18.6	19.2	19.8	20.3	20.1	19.4	17.8	16	14.8	14.6	14.9	14.8	13.8
2	14.9	15	15	15.2	15	14.4	14.2	14.8	16.6	18.2	19.5	20.6	22.2	23.4	23	21.6	20.5	19.8	17.9	17	16.2	16.5	16.8	16.7	17.7
3	16.6	16.3	16.1	16.1	15.9	15.7	15.3	15.4	15.8	15.5	15.3	16.2	16.7	16.8	16.9	17.3	16.9	15.3	13.4	12.2	11.6	11.1	10.7	10.6	15
4	10.9	11.2	11.4	11.2	11.3	11.9	12.8	14.1	15.9	18.1	20.7	23.1	24.8	25.4	26	26.5	26	24.9	23.6	22.5	20.9	19.6	18.8	18.2	18.8
5	17.6	16.8	16.7	16.6	16.1	15.7	15.7	16.2	18.4	20.5	22.3	23.3	24.5	25.2	26	25.8	25.1	24.4	23	21.6	20.5	19.5	18.9	18.7	20.4
6	18.7	18.7	18.4	18.6	18.4	18.4	18.9	19.9	21.3	22.7	23.2	23.6	22.2	16.6	16.9	17.6	18.2	18.5	18.3	18.2	18.1	17.8	17.3	16.7	19
7	16.5	15.4	14.6	13.3	12	11.4	10.4	10.6	11.6	12.2	12.8	13	13.2	13.2	13.1	13	12.7	12.2	11.5	11	10.9	10.8	9.5	5.2	12.1
8	5.1	5.2	5.4	5.2	4.1	3.8	4.7	5.4	7	8.6	9.7	10.7	10.9	10.7	11	11.4	10.7	10.2	9.3	8.2	7.3	7.1	6.5	6.3	7.7
9	5.7	5.3	4.4	4.1	3.3	2	1.4	2.1	5.2	7.1	7.9	8.6	9.1	9.6	9.1	8.2	8.2	7.3	6.3	6.2	6.2	6.1	6	6	6.1
10	6	5.9	5.8	5.7	5.5	5.1	4.8	4.8	4.6	4.5	4.6	4.5	4.2	4.3	4	3.5	2.3	1.7	1.5	0.9	2.1	2.9	3	3	4
11	3	3.1	3.4	2.8	1.6	1.4	1.7	2.3	4.4	7.1	8.6	9.7	10.8	11.3	12.2	13.1	13.6	13.3	11.9	11	10.6	9.9	8.8	8.5	7.7
12	8.5	8.8	8.6	8.1	8.5	8.2	7.6	8.6	10.7	13.1	14.4	15.1	15.8	16.7	17.4	17.5	17.4	16.6	11.4	8.1	7.5	7.4	7.2	6.6	11.2
13	5.7	4.8	4.3	4.2	3.8	3.5	3.4	4.1	4.9	6.3	7.8	8.9	10	11.3	11.9	10.8	8.2	7.5	6.5	5.9	5.2	4.7	4.7	4.5	6.4
14	4.6	4.6	4.2	3.4	2.6	1.9	2.3	3.8	6.1	7.6	8.5	10.6	11.7	12.5	12.4	12.6	12.5	11.5	10.6	10.7	11	10.9	11.3	11.7	8.3
15	11.9	12	11.9	12.3	12.9	13.1	12.8	12.5	13	13.6	13.9	14.4	14.5	14.6	14.3	14.6	14.9	14.3	13.9	13.1	12.9	12.6	12.6	12.4	13.3
16	11.3	10.8	10.8	10.9	11.2	11.1	11.3	11	10.8	11.1	12	12.5	14.4	16	16.2	16.5	16.5	16.4	16.3	11.4	8.9	8	7.1	6.6	12
17	6.2	6.2	6	5.6	5.2	5	4.9	5.1	5.6	6.3	6.5	6.9	6.9	7.5	6.9	6.8	6.8	6.5	5.8	5.3	5.1	5.1	4.8	4.2	5.9
18	4.1	4.1	4	3.6	3.4	3	3.3	4.6	6.9	9.5	11.2	12.3	13.1	13.3	13.1	12.5	11.5	10.4	10.3	10.3	10.2	10.3	10.7	11.3	8.6
19	11.4	12.1	11.7	12	11.4	10.8	10.7	11.7	13.1	13.3	13.2	12.9	12	10.9	10.7	10.6	10	9	7.8	6.6	5.9	5.7	5.5	5.3	10.2
20	4.9	4.6	4.2	4.1	3.2	2.7	2.7	4.6	6.6	7.8	8.9	10.1	11.5	13.2	14.5	15.2	15.5	14.9	13.4	13	13	13.3	13.3	13.2	9.5
21	13.2	13.4	14	15	15.5	15.5	15.3	16.1	16.7	15.5	15.1	14.9	16.1	18.5	15.9	13.6	12.5	11.2	10.1	9.6	9.7	8.6	7.7	6.9	13.4
22	6	4.9	4	3.2	2.5	1.9	1.7	2.2	3.1	3.8	4.9	5.3	5.3	6.2	6.1	6.1	5.6	5.1	4.5	2.9	2.4	2.3	2.3	1.4	3.9
23	-0.2	-0.6	-0.6	-0.6	-0.6	-0.6	-0.2	1.6	3.2	4.5	5.8	7	7.6	8.4	8.6	7.9	8.7	8.4	7	5.8	4.9	4.1	3.7	3.6	4.1
24	3.9	3.8	3.8	3.6	3.6	2.9	3.6	5.3	8	10.2	11.7	12.3	13.4	14.1	13.9	13.7	13.7	14.1	12.7	11.5	10.8	9.8	9.8	9.7	9.2
25	9.2	9.2	9.6	9.8	9.9	10.2	10.6	12.2	14.8	16.7	17.7	18.4	19.1	19.7	20.2	19.7	20.3	19.1	17.2	15.9	14.9	14.2	13.6	13	14.8
26	12.7	12.5	12.3	12.1	11.9	11.5	11.8	13.3	16.5	18.7	19.9	20.6	21.5	22	22.1	21.2	21.5	20.9	19.1	18	16.9	16.5	16	15.2	16.9
27	14.9	14.6	14.3	13.8	13.5	13.5	13.7	15	17.2	19.5	21.4	22	23	23.7	24	23.6	21.2	20.6	19.9	19.2	18.7	18.4	17.9	18.4	18.4
28	18.2	17.3	16.7	16.1	14.9	12	10.4	10	10.4	10.6	11.2	11	10.9	9.6	8.9	8.4	8.1	8.6	8.6	8.1	7.6	7	6.5	6.5	10.7
29	6.4	6.1	6.1	6.1	6.3	6.8	7.1	7.4	7.5	7.6	7.6	7.8	8.7	8.7	8.8	7.9	7.3	6.9	6.6	6.4	6.4	6.3	6.3	6.3	7.1
30	6	5.9	5.8	5.5	5.7	5.7	5.9	6.2	6.9	8.1	9.1	9.6	9.5	9.6	9.8	9.7	9.4	9.1	8.7	8.5	8.4	8.3	8.3	7.9	7.8
31	8	8.1	8.2	8.3	8.3	8.2	8.4	8.4	8.6	8.5	8.5	8.4	8.5	9.6	10.9	12.8	13.3	12.6	10	9.1	8.4	8	7.6	7.7	9.1
Avg	9.4	9.2	9	8.8	8.5	8.2	8.2	8.9	10.3	11.6	12.6	13.3	13.9	14.3	14.3	14.2	13.8	13.3	12.1	11.1	10.6	10.2	9.9	9.6	11.1
S/D	5.1	5	5	5.1	5.2	5.2	5.2	5.1	5.1	5.2	5.4	5.5	5.7	5.7	5.8	5.9	5.8	5.5	5.4	5.1	5	4.9	5	5	4.8
S/A	0.54	0.55	0.56	0.58	0.61	0.64	0.63	0.57	0.49	0.45	0.43	0.42	0.41	0.4	0.41	0.41	0.42	0.44	0.46	0.48	0.48	0.48	0.49	0.52	0.43
Min	-0.2	-0.6	-0.6	-0.6	-0.6	-0.6	-0.2	1.6	3.1	3.8	4.6	4.5	4.2	4.3	4	3.5	2.3	1.7	1.5	0.9	2.1	2.3	2.3	1.4	3.9
Max	18.7	18.7	18.4	18.6	18.4	18.4	18.9	19.9	21.3	22.7	23.2	23.6	24.8	25.4	26	26.5	26	24.9	23.6	22.5	20.9	19.6	18.9	18.7	20.4
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C Serial Number: P0520031 Calibration Factor: 1.00 deg C/mV Calibration Date: 03/1988

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

March 2004

Relative Humidity (Tower)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Percent

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	54.5	56.4	58.4	60.8	60.2	61.8	61.6	62.7	60.5	50.6	51.9	53.7	54.1	54.2	52.8	51.5	52.8	55.4	61.3	68.7	76.2	76.2	78.1	81	60.6	
2	83.2	85.5	87	88.2	89.9	93	94.9	94.2	88.2	84.6	80.6	75.1	67.3	61.7	59.9	66.9	73.6	78.5	92	96.7	100.4	99.4	98.1	98	84.9	
3	97.9	98.6	99	99	99.7	100.3	100.7	96.9	89.1	78.5	61.6	58.3	54.8	53.8	52.2	51.5	52.7	58.3	66.4	71.4	73.8	77.2	81.6	81.1	77.3	
4	81.5	90.6	95.2	97.7	100.1	102.7	102.1	98.9	94.1	86.6	77	66.1	59.5	56.2	54.2	49.4	51.3	56	58.6	60.5	67.9	84.2	89.2	90.5	77.9	
5	94	98.2	100.7	101.6	102.9	103.9	104.3	103.6	99	92.2	83	76.4	71.5	66.8	60.8	59.5	64	66.7	74.5	83.9	88	90.3	90.8	90	86.1	
6	89.6	91.4	94.2	95.2	96.4	97	96.7	93.9	86.9	79.7	76	73.5	77.7	101.9	100	94.2	93	94.6	96.8	95.5	89.9	88.6	88.3	82.6	90.6	
7	66.7	64.8	64.8	73.6	81	79.3	77.8	77.3	68	58.7	57.1	56.8	57.1	55.7	54.4	56.4	61.5	67.4	80.3	90.1	94.5	98.9	101.2	101.7	72.7	
8	102	101.2	101.9	97.9	101.1	103.7	98.8	89.4	79.5	63.6	51.6	46.9	44.6	43.7	42.7	40.1	42	46.1	50.1	54.2	58.7	61.1	66.5	67.4	68.9	
9	67.5	67.3	73.9	75.6	79.3	86.3	91	92.4	74.2	59.5	51.6	49.7	50.3	51.3	56.6	55.4	54.1	55.8	63.2	65.6	71.7	67.4	70.4	72.7	66.8	
10	74.8	73.4	75.6	73.7	75.5	83.9	87.5	89.1	94	99.3	100.2	101.6	102.5	102.1	101.7	101.9	102.6	104	104.4	104.9 ?	104	101.6	100.7	99.8	94.1	
11	97.3	92.8	87.8	89.8	95.7	95.5	93	90.3	82	67.7	58.5	53.3	50.6	48.8	47.6	44.8	43.4	46.9	52.5	56.4	59	65.9	76.7	74.4	69.6	
12	74	72.3	74.3	77.3	73.3	72.6	72.9	65.6	57.4	41.4	32.9	30.7	30.6	28.5	26.1	25.6	22.5	24.2	48.3	60.3	62.4	62.4	67.1	73.2	53.2	
13	81.7	84.8	86.3	86.3	84.3	82.1	82.2	75.8	70.4	56.8	46.3	39.7	34.8	34.6	32.6	44.7	65.1	66.1	70.5	72	78.5	81.3	80.4	83.3	67.5	
14	84	81.9	84.1	88.3	91.3	96.8	97.7	93.9	83.2	71.1	64.7	53.5	61.7	57.6	66.6	72.4	76.4	82.9	89.2	92.3	94.4	95.4	94.2	94.4	82	
15	96	97.3	98.6	98.8	98.1	98.3	100.5	104.1 ?	?	?	104.8 ?	104.1	103.4	103.3	103	102	100.8	104	104.7	104.8 ?	?	?	?	?	101.5 ?	
16	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
17	104.5	104.2	103.7	102.1	101.1	100.8	99.9	98.5	95.6	90.8	88.1	84.1	82	77.4	82	81.8	82.7	87.5	92	95.4	95.7	96.2	96.3	99.9	93.4	
18	101.9	103	103.4	104.2	104.1	103.7	102.7	100.7	94.2	77	63.6	54.3	52.7	55.1	60.9	70.6	85.9	98.2	99.7	99.6	100.2	97.7	93	89.5	88.2	
19	89.9	90.6	93.1	90.4	92.2	96.4	97.1	91	64.2	47.1	46.6	47.8	50.2	55.3	57.1	59.4	64.2	68.9	74.8	84.8	90.2	90.5	85.8	89.4	75.7	
20	91.8	93	92.4	90.5	94.8	97.5	99.1	94.6	77.6	68.5	66.8	61	56.9	53.9	51.7	49.3	54.3	63.9	71.9	72.5	78.9	83.4	85	88.7	76.6	
21	91.8	94.5	95.7	95.8	94.5	95.7	98.2	96.1	94.4	96.2	60.4	67.1	66.4	35.4	50.5	60.9	62	66.3	67.6	68.4	60.7	48.3	50.2	49.9	73.6	
22	50.8	53.1	58.3	61.7	63.5	61.2	52	45.7	44.6	42.3	39.4	38.6	38.6	38.1	36.9	36.1	36.5	36.9	40.2	53.6	55.7	56.2	54.8	64.8	48.3	
23	75.1	75.8	69.8	65.9	65.9	65.9	64.1	55.2	41.9	34.8	33	33.7	33.9	32.1	32.8	38	33.8	35.6	41.9	59.6	77.1	80.8	82.2	84	54.7	
24	85.5	88	82.9	77.5	77.9	82.7	82.3	80.6	72.4	57.8	50.6	40.6	33.1	30.9	41.2	35.5	40.4	26.3	35	59.5	71.7	78.2	79.9	82.4	62.2	
25	86.9	89.3	89.5	89.5	89.9	90.1	90.8	85.3	74.1	63.2	61	55.8	52	50.1	48.5	53.2	50.1	60	68.8	72.7	77	80.7	85	88.9	73	
26	91.6	93.5	94.9	96.3	97.4	98.9	98.7	93.9	80.5	70.2	66.7	63.1	53.9	53.9	55.2	59.7	60	61.1	68.7	70.3	76.6	78.1	81.4	86.2	77.1	
27	89.7	93.8	96.9	99.2	100.3	100.5	100	95.5	85.4	74.2	67	65.2	62.5	59.4	57.8	59.4	68.9	69	71	73.9	76	78.4	81.6	80.2	79.4	
28	82.9	87	91.2	94.5	96.2	101.1	100	97.8	93.9	91	84.2	80.8	80.9	88.6	92.1	93.9	95	86.9	84.7	87.3	90.7	95.3	98.4	98	91.3	
29	95.8	95.3	94.9	94.7	95.8	95.7	94.3	94.3	94.5	94.5	93.9	91.1	86.7	85.9	85.8	91.9	94.9	97.1	98.3	99.3	98.9	97.5	96.2	96.7	94.3	
30	98.7	98.7	100.2	102.9	102.1	104.3	?	?	103.8 ?	98.8	97.4	97.7	99.1	100.5	101.6	103.1	104	103.5	104	104.7 ?	?	?	?	?	101.4 ?	
31	?	?	?	?	?	?	?	?	?	?	?	?	?	103.8	100.9	95.6	94.6	94.7	100.2	103.6	?	?	?	?	99.1 ?	
Avg	85.6	86.8	87.9	88.6	89.8	91.4	90.7	87.8	80.1	71.3	66.1	62.8	61	61.4	62.2	63.5	66.1	68.8	74.4	80.2	80.3	81.9	83.4	85.5	78.1	
SD	13.5	13.5	13.1	12.5	12.6	12.8	13.6	14.6	15.9	18.6	19.6	19.9	20.3	23.4	22.9	22.4	22.6	23	20.6	17.6	14.4	14.4	13.1	12.5	14.3	
S/A	0.16	0.16	0.15	0.14	0.14	0.14	0.15	0.17	0.2	0.26	0.3	0.32	0.33	0.38	0.37	0.35	0.34	0.33	0.28	0.22	0.18	0.18	0.16	0.15	0.18	
Min	50.8	53.1	58.3	60.8	60.2	61.2	52	45.7	41.9	34.8	32.9	30.7	30.6	28.5	26.1	25.6	22.5	24.2	35	53.6	55.7	48.3	50.2	49.9	48.3	
Max	104.5	104.2	103.7	104.2	104.1	104.3	104.3	104.1	103.8	99.3	104.8	104.1	103.4	103.8	103	103.1	104	104	104.7	104.9	104	101.6	101.2	104.7	101.5	
n	348	348	348	348	348	346	336	331	331	336	341	348	348	360	360	360	360	360	360	360	336	322	324	324	8245	

Data Recovery: 0.0% missing; 7.5% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C Serial Number: P0520031 Calibration Factor: 0.10 %/mV Calibration Date: 01/1999

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Dry Bulb Temperature (CR10)
Hourly and Daily Averages
Instrument: CSI
Degrees Celsius

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	9.5	8.4	6.9	6.1	5.8	5.4	4.9	5.2	7.7	11.2	14.7	17.5	19.5	20.8	21.4	21.8	21.9	21.1	19	16.7	15.1	14	13.9	14.4	13.4
2	14.6	14.8	14.7	14.7	14.4	13.9	13.6	13.8	15.6	18	19.3	20.6	22.2	24.1	24.7	24	22.5	21.1	19.4	17.8	16.8	16.5	16.6	16.8	17.9
3	16.7	16.5	16.3	16.2	16.1	15.9	15.5	15.1	16.3	17.5	18.2	19.2	20.2	20.8	20.7	20.4	20.3	19.1	16.1	13.4	11.8	10.8	10.3	9.8	16.4
4	9.7	9.9	10.2	10.3	10.3	10.4	11	12.1	14.1	16.6	19.9	23	25.5	27.1	27.7	28.1	28	26.8	24.6	23	21.5	20.3	19.3	18.5	18.7
5	17.7	16.8	16.2	16.1	15.8	15.4	15.1	15.2	16.9	19.8	22.5	24.2	25.7	26.8	27.6	27.7	26.8	25.6	24.3	22.8	21.5	20.3	19.2	18.7	20.8
6	18.3	18.2	18.1	17.9	18	17.9	18	18.6	20.1	22.2	23.6	24	24.1	21.3	18	17	17.3	18.1	18.1	17.9	17.7	17.4	17	16.3	19
7	15.6	15	13.9	12.9	12	11.3	10.4	9.9	11.3	13.4	15.3	16.7	17.4	17.4	17.1	16.4	15.6	14.7	13.2	11.9	10.9	10.5	10.2	8.3	13.4
8	6	5.2	4.9	4.8	3.9	3.1	2.9	3.6	5.9	8.7	10.9	12.5	13.8	13.4	13	12.9	12.8	11.6	10.3	8.5	6.8	6	5.7	5	8
9	4	3.1	2.2	1.6	1.4	0.1	-1.1	-1.1	1.4	6	9.9	12.1	13.4	14.3	14.5	12.8	11.6	10.3	7.9	6.6	6.2	6	5.7	5.6	6.4
10	5.5	5.6	5.5	5.4	5.1	4.7	4.6	4.7	4.7	4.5	4.5	4.7	4.5	4.5	4.4	4.1	3.4	2.5	1.9	1.4	1	1.4	1.6	1.6	3.8
11	1.6	1.4	1.5	1.6	1	0.3	0	1	3.5	6.7	9.7	11.8	13.4	14.2	14.2	14.5	14.9	14.8	13.1	10.7	9.3	8.7	8	7.3	7.6
12	7	7	7.3	7.1	6.9	6.8	6.3	6.8	9.3	12.2	14.7	16.3	17.4	18.2	18.8	19.2	19.1	18.5	15.9	10.8	7.8	6.2	5.5	4.8	11.2
13	3.8	3	2.5	2.4	2.2	1.8	1.6	2.5	4.4	6.5	8.8	11.1	12.8	14.3	15.1	15	13	11	8.1	5.7	4.3	3.1	2.4	2.3	6.6
14	2	2.2	2	1.1	0.8	0.6	0.7	1.4	3.6	6.9	9.3	11.6	14.4	16	16.1	15.8	15.5	14.6	12.5	10.9	10.4	10	9.8	10.1	8.3
15	10.3	10.5	10.7	11.1	11.7	12.4	12.7	12.5	12.6	13.1	13.7	14.1	14.7	15	15	15	15.3	15.2	14.8	14.3	13.6	13.3	13.1	13	13.2
16	12.7	11.9	11.5	11.3	11.3	11.4	11.5	11.6	11.3	11.3	11.8	12.6	13.2	14.7	15.8	16.3	16.6	16.7	16.6	15.4	12.3	10.2	9	8	12.7
17	7.3	6.9	6.6	6.3	6	5.6	5.3	5.3	5.8	6.7	7.7	8.2	8.5	8.7	8.8	8.2	7.8	7.3	6.5	5.4	4.4	4.1	3.6	2.9	6.4
18	2.4	2.4	2.7	2.6	2.2	1.7	1.2	2.3	4.3	8.6	12.4	14.7	16.1	16.6	15.9	14.9	13.6	12.1	11.1	10.6	10.4	10.1	10.1	10.4	8.7
19	10.8	10.8	10.4	10.4	10.8	10.4	10.2	10.7	12.6	14.4	15.5	16	15.8	15.2	14.2	13.7	13.2	12.2	9.9	7.3	5.5	4.6	4.1	3.6	10.9
20	3.3	3.1	2.6	1.9	1.3	0.2	-0.2	1.7	5.5	8.5	10.9	12.8	14.3	15.3	16.2	17	17.4	17.2	15.4	13.4	12.5	12.4	12.6	12.6	9.5
21	12.6	12.6	12.8	13.5	14.1	14.8	15	15	15.9	16.3	14.9	15.1	16.9	19.3	20.5	18.5	16.8	14.2	11.7	10.2	9.6	8.9	8.3	7.6	14
22	6.8	5.8	4.5	3.4	2	1.3	0.6	1.3	3	4.9	6.6	8	8.9	9.2	9.6	9	8.5	7	5.1	3	1.4	0.3	-0.5	-1	4.5
23	-2.4	-3.5	-4	-4	-3.7	-3.6	-3.3	-1.1	2.3	5.3	7.9	10.3	11.9	12.8	13	12.1	11.3	10.9	8.9	5.9	4.1	3.1	2.2	1.7	4.1
24	1.3	1.3	1.3	1.4	1	0.7	0.3	2.5	6.4	10.1	13.4	15.3	16.4	17	17.3	16.8	16.5	16	14.5	12	10.4	9.5	8.8	8.3	9.1
25	7.6	7.3	7.9	8.5	8.9	9.2	9.5	10.7	13.7	17	19.4	21.2	22.3	22.7	23	23.1	22.9	22.3	20	17.2	15.3	14.1	13.2	12.3	15.4
26	11.6	11.2	11	10.7	10.5	10.3	10	11.3	14.4	18.5	21.4	23.3	24.6	25.3	25.7	25.1	24.3	23.4	21.5	19.2	17.7	16.7	16	15.1	17.4
27	14.2	13.8	13.5	13.1	12.6	12.5	12.6	13.9	16.3	19.2	21.8	23.7	24.8	25.9	26.1	26.3	25.3	22.9	21.3	20	19.1	18.5	18	17.5	18.9
28	17.4	16.8	16.1	15.6	15.1	14.2	12.7	11.5	11.6	12.5	13.3	14.1	14.1	13.5	11.7	10.5	9.6	9.1	9	8.8	8.3	7.9	7.4	7	12
29	6.8	6.5	6.4	6.3	6.3	6.5	6.8	7.2	7.7	8.1	8.5	8.9	9.6	10.5	10.9	10.5	9.5	8.5	7.7	7.2	6.9	6.7	6.6	6.5	7.8
30	6.4	6.3	6.1	5.9	5.9	5.8	5.9	6.1	6.7	8	10.2	11.2	11.7	11.8	11.8	11.5	10.9	10.3	9.6	9.1	8.8	8.6	8.5	8.4	8.6
31	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.6	8.7	8.8	8.8	8.9	8.9	10	11.6	14	15.7	15.9	13.2	11.1	10	9.2	8.7	8.3	10
Avg	8.7	8.4	8.1	7.9	7.7	7.4	7.2	7.7	9.5	11.7	13.5	15	16	16.7	16.8	16.5	16.1	15.2	13.6	11.9	10.7	10	9.5	9.1	11.4
S D	5.5	5.5	5.5	5.5	5.6	5.8	5.9	5.5	5.2	5.1	5.1	5.3	5.6	5.7	5.8	5.9	5.9	5.8	5.7	5.5	5.5	5.4	5.4	5.4	4.8
S/A	0.63	0.66	0.68	0.7	0.74	0.78	0.81	0.71	0.55	0.44	0.38	0.36	0.35	0.34	0.34	0.35	0.37	0.38	0.42	0.47	0.51	0.54	0.56	0.59	0.42
Min	-2.4	-3.5	-4	-4	-3.7	-3.6	-3.3	-1.1	1.4	4.5	4.5	4.7	4.5	4.5	4.4	4.1	3.4	2.5	1.9	1.4	1	0.3	-0.5	-1	3.8
Max	18.3	18.2	18.1	17.9	18	17.9	18	18.6	20.1	22.2	23.6	24.2	25.7	27.1	27.7	28.1	28	26.8	24.6	23	21.5	20.3	19.3	18.7	20.8
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI Serial Number: Internal Temp Calibration Factor: N/A Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Wind Speed
Hourly and Daily Averages
Instrument: NRG MAX-40
Meters per Second

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	1.9	1	1.4	2.1	2.5	2	1.9	1.4	3	4.2	5.3	5.8	5.4	6.1	5.7	5.2	4.6	3.3	1.4	2.7	2.6	3.3	3.9	3.5	3.3
2	3.3	3.1	2.7	3.4	3.5	3.3	3.6	3.6	4.8	5.8	5.9	6.3	7.2	7.4	7.7	5.6	4.2	3.1	2.2	2	1	2.2	2.4	2.1	4
3	2	2	1.6	1.6	1.5	1.5	1.2	2.3	3.3	4.4	4.1	3.5	3.2	3	2.8	2.9	3.4	3.1	1.8	2.1	1.3	2	1.9	1.4	2.4
4	2.2	1.7	1.4	1.3	1	1.5	1.7	2.5	3.9	3.8	3.7	5.2	5.1	6.1	5.5	5.2	3.7	1.9	2.8	2.1	1.9	2.2	2.4	2.7	3
5	2.7	2	2.3	2.3	2.6	2.3	1.9	2.1	3.4	5.2	6.3	7.1	5.8	5.9	6.6	6.2	5.2	4	3.5	4.2	4.7	4	4.3	4.5	4.1
6	4.9	4.9	4.6	5.6	5.5	5.7	5.9	6.4	7.6	9.5	8.8	7.5	5.7	4.6	6.4	6.6	4.9	4	3.4	3.8	3.1	2.4	2.1	1.8	5.2
7	2.1	1.2	0.9	1.2	1.6	1.6	1.9	2.2	2.6	3.3	2.9	3.2	4.1	3.5	3.7	4.2	4.2	4.1	3.8	3	2.4	2.5	4.9	5.1	2.9
8	3.8	2.7	3.3	3.2	2.4	2	3.1	3	3.2	4.4	4.5	4.5	4.9	4.4	4.6	4.2	3.9	2.9	2.3	1.4	0.9	0.9	0.4	0.9	3
9	0.7	0.1	0.3	1.1	0.3	0	0	0	1.3	1.7	1.6	1.4	2	3	3.3	4	3.7	3.7	2.7	2.7	3.1	3.6	3	3.6	1.9
10	3.8	3.7	4.2	4.6	4.1	3.4	4.5	5.2	5.3	5.2	6.5	6	6.1	6.5	6.8	6.7	6.4	5.4	5.5	4.9	2.9	2.4	3	3.6	4.9
11	3.5	2.8	3	1.8	2.2	2.3	2.4	1.8	2.2	2.7	3.3	3.2	3	4.3	4.4	4.7	4.1	2.7	1.7	1.6	1.8	2	2.3	2.4	2.8
12	2.8	3.7	3.6	3.7	3.4	2.6	2	2.7	4.4	5.9	6.3	6.5	6.2	5.3	4.2	4.4	4	2.5	3.6	3.2	2.3	2.2	1.8	0.5	3.7
13	0.5	1.4	2.4	2.2	2.2	2.5	2.2	2.7	3.9	4.3	3.6	3.1	2.3	1.4	1.8	2.5	3.8	2.6	1.7	1.9	1.8	1.2	1.9	1.2	2.3
14	1.8	1.4	0.5	1	0	0	0	0.1	1.6	5	4.3	2.1	2.6	2.8	3	3.6	3.7	3.4	2.5	2.5	2	2.1	2.5	2.4	2.1
15	2.2	1.8	1	1.5	1.9	1.8	1.6	1.1	2.2	2.1	0.9	0	0.1	0	0.4	0.2	0.2	0.5	0.1	0.8	1.1	1.6	0.5	1.4	1
16	1.8	2.6	2.9	3	2.7	2.6	2.3	3.1	2.8	1.4	0.1	0	0.5	2.1	2.5	1.9	1.5	1.7	2.5	3.5	3.4	2.4	2.5	2.2	2.2
17	1.3	1.2	1.5	2.1	2.2	2.5	1.9	1.2	1.1	1.4	2.5	2	1.4	1	1.5	0.2	0.1	0.4	1.3	0.7	0.2	0.1	0.8	0.5	1.2
18	0.5	1.7	1.8	1.3	0.9	0.1	0.3	1	0.7	1.6	2.3	2.9	2.4	1.8	2.4	3.2	3.1	1.3	1.7	1.3	2.1	3.3	3.6	4.2	1.9
19	3.3	4.7	3.8	4.1	3.1	2.6	1.9	3.2	5.9	6.1	6.4	6.4	6.8	6.2	4.7	4.4	4	3.6	2.8	2.3	2.4	2.7	1.8	2.1	4
20	2.5	1.7	0.7	0.6	0	0	0	0.1	2.3	3.1	2.7	2.6	3.9	4.1	4.1	4.7	4.7	4.5	4.1	4.8	5.3	6	5.9	4.9	3.1
21	4.7	5.2	5.7	6.1	5.9	5.4	5.1	4.7	4.1	3	3.2	1.8	1.7	3.1	4.4	4	3.3	2.6	2.1	1.8	2.8	4.2	3.7	4.2	3.9
22	4.8	4	3.3	2.5	2.9	2.2	2.7	4.5	4.7	6	5.1	4.8	3.9	3.3	3.7	3.9	3.9	2.5	2.2	2	1.5	0.9	0.7	0.3	3.2
23	0.2	0.3	0.7	1	1.1	1.4	1.8	2.2	2.6	2	1.7	1.3	1.4	1.4	2.6	3.7	2.7	2.6	1.6	1.7	1.8	1.9	2.1	1.6	1.7
24	1.4	1.3	1.6	1	1	0.3	0.6	1.1	2	1.7	2.4	2.8	3.5	3.4	4.4	4.4	3.3	3.1	2.2	2.4	2.5	2.1	1.9	0.8	2.1
25	0.4	1.2	1	0.7	0.5	0.7	1.1	1.2	2.3	3.4	3.3	3.1	3.8	3.8	3.5	3.3	3.5	3.7	3.2	2.8	2.4	2.2	1.8	1	2.3
26	1.4	1.1	1.3	1	1	0.3	0.5	0.8	2	3.1	2.9	3.2	3.4	3.4	3.9	4.9	3.4	3	2.7	3.2	2.5	2.9	2.3	2.4	2.4
27	2.7	2.3	1.8	1.2	1.5	1.8	2.5	3.8	4.4	5.1	4.7	4.7	3.6	2.1	1.7	2	2.4	0.8	0.4	0	0	0.2	0.2	1.6	2.2
28	1.8	1.3	2.2	2.7	4.2	5.5	4.8	5.3	5.4	5.7	6	5.8	6	5.6	5.3	5.1	4.5	4.2	5	6.6	5.4	6.1	5	4.6	4.8
29	5.5	4.8	5	5.5	3.7	4.6	5.1	5.4	5.1	4.9	4.9	5.8	4.6	4.5	4.4	4.8	4.6	4	4	3.8	3.6	4.1	3.8	3	4.6
30	2.7	3.2	2.5	2.2	2.3	1.9	2.1	2.3	3.2	3.2	2.8	2.6	2.8	2.7	2.5	2.3	2	2.2	1.9	1.2	1	0.6	0.5	1.8	2.2
31	0.3	0.3	0.4	0.2	0.1	0.5	0.7	0.4	0.6	1	1.3	2.2	3.2	2.9	1.6	0.3	2	2.8	3.2	2	2.1	2.2	1.4	0	1.3
Avg	2.4	2.3	2.2	2.3	2.2	2.1	2.2	2.5	3.3	3.9	3.9	3.8	3.8	3.7	3.9	3.8	3.5	2.9	2.6	2.5	2.3	2.5	2.4	2.3	2.9
SD	1.4	1.4	1.4	1.6	1.5	1.6	1.6	1.7	1.6	1.9	2	2.1	1.9	1.8	1.7	1.7	1.3	1.2	1.2	1.4	1.3	1.4	1.4	1.5	1.1
S/A	0.61	0.63	0.64	0.67	0.69	0.76	0.73	0.68	0.5	0.49	0.51	0.54	0.49	0.48	0.45	0.44	0.38	0.4	0.46	0.54	0.55	0.57	0.59	0.63	0.39
Min	0.2	0.1	0.3	0.2	0	0	0	0	0.6	1	0.1	0	0.1	0	0.4	0.2	0.1	0.4	0.1	0	0	0.1	0.2	0	1
Max	5.5	5.2	5.7	6.1	5.9	5.7	5.9	6.4	7.6	9.5	8.8	7.5	7.2	7.4	7.7	6.7	6.4	5.4	5.5	6.6	5.4	6.1	5.9	5.1	5.2
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40 Serial Number: 0 Calibration Factor: 0.76171 m/s/mV Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Wind Direction
Hourly and Daily Averages
Instrument: NRG Vane
Degrees from North

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	220	209	218	226	225	220	221	216	230	234	232	230	228	239	219	219	225	224	189	161	175	189	194	191	218
2	197	199	201	195	194	193	190	194	206	215	224	226	236	233	247	264	255	270	259	268	209	247	251	238	226
3	237	239	248	262	274	289	294	341	26	56	64	62	80	94	108	83	106	122	116	104	124	125	122	133	87
4	134	147	142	156	167	198	210	216	228	239	231	234	234	225	222	229	227	213	223	211	175	183	192	192	214
5	192	190	186	196	190	196	191	192	205	220	221	221	204	198	212	224	220	217	190	187	191	189	199	192	205
6	198	200	194	199	197	200	206	216	221	224	225	233	253	289	245	234	235	232	225	229	238	252	267	304	225
7	319	316	323	61	41	46	49	59	52	62	80	88	90	113	107	106	105	109	106	102	98	100	290	301	79
8	309	289	288	298	271	257	264	269	279	288	293	291	288	290	288	286	284	287	287	281	283	297	270	308	286
9	303	318	333	354	348	0	0	309	21	36	64	110	92	88	69	57	61	58	55	59	54	49	58	59	58
10	55	43	38	39	25	1	356	348	342	342	340	340	336	335	337	343	338	333	337	330	300	299	295	300	346
11	298	308	311	296	291	295	294	288	300	304	302	296	284	263	252	245	232	215	202	202	188	187	193	200	265
12	207	218	226	230	239	254	246	237	251	268	265	263	258	259	270	266	278	287	60	69	68	76	76	37	256
13	359	342	350	0	0	349	3	7	357	344	332	325	324	331	272	109	108	94	80	73	67	71	75	91	14
14	78	73	62	53	56	0	268	118	111	110	126	123	78	121	121	105	118	123	117	134	153	162	177	183	121
15	193	188	191	204	199	196	200	237	239	239	271	355	68	311	23	91	102	137	121	104	107	88	61	62	190
16	56	71	77	81	91	83	80	84	84	88	85	68	153	187	196	191	189	221	247	313	322	322	316	324	68
17	322	328	333	347	326	352	350	341	321	356	350	8	352	352	46	69	110	55	86	103	107	124	135	209	355
18	221	233	232	223	223	187	225	214	212	197	199	168	159	169	146	183	205	200	149	136	134	145	159	161	177
19	166	186	218	243	251	269	271	273	298	299	306	310	331	346	357	350	21	26	27	53	50	58	58	92	321
20	103	111	106	105	187	0	302	150	133	122	151	185	170	179	186	180	186	183	178	182	195	200	209	208	178
21	201	201	203	216	223	225	231	246	249	276	296	359	7	292	46	82	68	65	52	41	340	328	343	334	259
22	331	320	320	320	329	323	332	335	333	336	325	333	327	315	320	311	319	302	337	41	44	34	30	358	330
23	283	290	299	315	314	318	325	333	346	345	15	34	135	125	161	171	204	183	162	124	152	166	164	166	173
24	188	213	221	211	215	190	211	169	178	183	171	168	148	150	106	109	100	154	165	155	142	122	146	152	151
25	151	159	145	141	153	133	122	157	162	163	184	197	167	184	166	126	174	170	170	162	166	164	164	166	166
26	162	158	153	156	148	159	157	177	197	190	201	201	183	183	142	115	143	169	179	168	166	181	188	187	170
27	198	192	198	199	202	210	214	227	232	232	251	245	252	265	292	61	94	91	73	62	265	286	317	321	230
28	316	317	333	350	28	32	28	33	36	33	32	31	38	32	32	28	15	15	18	27	22	28	19	17	24
29	26	23	31	28	7	33	41	39	31	27	33	31	23	22	42	38	34	25	30	33	30	45	21	355	29
30	358	347	5	26	11	7	346	21	39	15	32	36	23	24	22	11	21	21	351	357	357	312	6	36	14
31	326	308	3	342	31	47	20	70	74	78	90	69	60	77	72	26	43	57	63	31	35	43	43	51	55
Avg	227	225	247	256	256	276	282	288	281	279	274	269	266	251	227	187	181	161	105	102	120	130	196	230	248
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG Vane Serial Number: 0 Calibration Factor: 0.1408 deg/mV Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

March 2004

Peak Wind Speed (1-Minute Gust)
Hourly and Daily Averages
Instrument: NRG MAX-40
Meters per Second

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	2.8	1.6	1.9	2.7	3.2	2.7	2.8	2.4	4.4	6.2	7.6	8.4	8.5	9.5	8.3	7.7	6.7	5	2.2	3.8	4.1	5.1	6	5.3	5
2	4.9	4.4	4.1	4.8	5.1	4.8	5.4	5.5	7.5	8.9	8.8	9.7	10.9	11.1	11.4	8.9	6.4	5	3.8	3.1	1.7	3.3	3.6	3	6.1
3	2.9	2.9	2.5	2.6	2.7	2.9	2.4	3.8	5.3	6.5	6.3	5.4	4.7	4.7	4.1	4.3	5	4.4	3	3	2	2.9	2.8	2.3	3.7
4	3.4	2.6	2.2	2	2	2.4	2.5	3.9	5.5	5.6	5.6	7.8	8	9.4	8.4	7.8	5.6	3	4	3.2	2.9	3.5	3.8	4.2	4.6
5	4.1	3.1	3.5	3.6	3.6	3.5	2.9	3.5	5.2	7.8	9.7	10.8	8.7	9.2	9.4	9.8	7.8	6.1	5.1	6.6	6.9	6	6.9	6.6	6.3
6	7.3	7.1	7.1	8.2	8	8.9	9.2	9.7	11.6	14.6	13.7	10.7	9.3	8.8	9.9	9.5	7.4	5.9	5	5.3	4.4	3.7	3.4	3.5	8
7	4.2	2.4	1.8	1.9	2.7	2.5	2.9	3.5	4.3	5.1	4.6	5	6	5.6	5.7	6	6.1	6	5.8	4.5	3.4	3.6	8.4	9.1	4.6
8	6.7	5.2	6.5	6.4	4.3	3.2	5.3	5.9	6.4	8.6	8.7	8.7	8.8	7.9	8.2	7.5	7.3	5.4	4.3	2.9	2.1	1.9	0.9	2.4	5.6
9	1.8	0.5	1	1.9	0.7	0	0	0.2	2.5	3	3.2	2.8	3.7	4.9	5.1	5.4	5.7	5.5	4.3	4.2	5.1	5.7	4.6	5.5	3.2
10	6.1	5.8	6.5	7	6.5	5.5	6.9	8.1	8.3	8	10.2	9.4	9.6	10.1	10.3	10.2	10.4	8.7	8.6	8.3	5.8	5.1	5.6	6.9	7.8
11	6.6	5.6	5.8	4	4.3	4.4	4.9	4.1	4.5	5.8	6.1	6.5	5.6	7.2	7	7.2	6.4	4.2	2.6	2.4	2.8	3.1	3.3	3.6	4.9
12	4	5.4	5.2	4.9	4.8	4	3	3.8	6.6	9.9	9.8	10.7	10.2	8.6	7.9	7.9	7.3	5.1	5.5	4.6	3.4	3.3	2.8	1	5.8
13	1.1	2.4	3.5	3.6	3.7	3.7	3.6	4.2	5.8	6.7	6.1	5.7	4.5	3.4	3.9	4.2	5.8	4	2.8	2.9	2.7	2	2.9	1.9	3.8
14	2.7	2.1	1	1.5	0.2	0	0	0.5	2.8	7.3	6.2	3.8	4	4.4	4.6	5.4	5.4	4.7	3.6	3.6	3.1	3.2	3.9	3.7	3.2
15	3.5	3	1.9	2.5	3.2	3	2.6	2.6	3.6	3.5	2.5	0	0.4	0.2	1.2	0.8	0.9	1.3	0.6	1.9	2.1	3.2	1.4	2.8	2
16	3.4	4.1	4.9	4.8	4.7	4.4	4	5.1	4.7	2.9	0.2	0.1	1.3	4	4.5	3.6	3.2	3.2	4.3	6.2	5.9	4.9	5.3	4.1	3.9
17	3.2	3	3.5	3.6	4.3	4.5	3.8	2.9	3.1	3.2	4.3	3.9	2.9	2.4	2.9	0.9	0.3	1	2.2	1.5	0.6	0.6	1.4	1	2.5
18	1.1	2.5	2.6	2	1.7	0.5	0.5	2	1.8	2.8	3.8	4.7	4.4	3.5	3.9	4.9	5	2.6	2.7	2.4	3.3	5.2	5.8	6.1	3.2
19	5.1	7.5	5.5	6.4	5.1	4.9	3.8	6	10.8	11.1	11.2	11	10.7	9.5	7.4	6.9	6.2	5.9	4.6	3.7	3.6	4.6	3.3	3.5	6.6
20	4	2.7	1.6	1.4	0.1	0	0.2	0.3	3.6	4.6	4.4	4.4	6.2	6.4	6.4	7.2	7.4	7.1	6.7	7.1	7.9	9	8.9	7.6	4.8
21	7.1	7.7	8.2	9.2	8.7	8.1	7.2	7.5	6.5	5.3	6.1	3.8	3.1	5.7	6.9	5.9	4.9	3.9	3.6	3.2	4.5	6.8	6.2	6.6	6.1
22	7.8	6.8	5.8	4.3	4.9	4.4	5	6.8	7.5	9.4	8.6	8	6.9	6.6	6.6	7	6.9	5	4.2	3.4	2.6	1.6	1.6	0.7	5.5
23	0.6	0.9	1.5	1.9	1.9	2.5	3.1	3.7	4.1	3.8	3.4	2.8	2.9	2.9	4.9	5.6	4.3	4	2.8	2.7	2.8	3	3.1	2.4	3
24	2.1	2	2.3	1.7	1.6	0.7	1.1	2.1	3.2	2.8	4.1	4.4	5.4	5.5	6.6	6.4	5	5	3.2	3.6	3.9	3.1	3.2	1.6	3.4
25	0.8	1.9	1.6	1.3	0.9	1.3	1.6	2	3.7	5.3	5.2	5.2	6.3	5.9	5.5	5	5.8	5.8	5	4.3	3.6	3.2	2.9	1.7	3.6
26	2.1	1.6	2.1	1.5	1.6	0.8	1	1.6	3.3	4.7	5	5.1	5.4	5.7	6.2	6.7	5.2	5.1	4.5	4.7	3.8	4.5	3.9	3.8	3.7
27	4	3.5	3	2	2.3	2.7	3.8	5.8	7.1	8.1	7.4	7.2	6.1	4.1	3.7	3.7	3.6	1.7	1.1	0.2	0.2	0.5	0.8	2.9	3.6
28	3	2.3	3.3	4.1	6.9	8.5	7.7	8.2	8.2	8.4	9	8.8	8.9	8.4	8.7	8.3	7.2	7.2	8.1	10.1	8.6	9.8	8.1	7.5	7.5
29	8.6	7.9	8.2	8.2	6.2	7.8	7.9	8.4	8.3	7.5	8.2	8.6	7.3	6.9	7.1	7.4	7	6.8	6.3	6	5.6	6.5	5.9	4.8	7.2
30	4.6	4.9	4.3	3.9	3.8	3.5	3.6	4.1	5.4	5	4.6	4.7	4.4	4.5	4.1	4.1	3.8	4	3.4	2.8	2.4	2	1.4	3.5	3.9
31	1.2	1.2	1.1	0.8	0.4	1.4	1.9	1.2	1.3	2.1	2.8	3.8	5.1	4.5	3.1	1.1	3.3	4.3	5.1	3.6	3.8	4	2.8	0.2	2.5
Avg	3.9	3.7	3.7	3.7	3.6	3.5	3.6	4.2	5.4	6.3	6.4	6.2	6.1	6.2	6.2	6	5.6	4.7	4.2	4.1	3.7	4	4	3.9	4.7
SD	2.2	2.1	2.2	2.3	2.3	2.5	2.4	2.5	2.8	2.9	3	2.7	2.6	2.4	2.4	2.4	2	1.7	1.8	2	1.9	2.1	2.2	2.3	1.7
S/A	0.56	0.58	0.59	0.61	0.63	0.71	0.67	0.61	0.46	0.45	0.46	0.49	0.45	0.42	0.39	0.4	0.36	0.36	0.43	0.5	0.51	0.52	0.54	0.58	0.35
Min	0.6	0.5	1	0.8	0.1	0	0	0.2	1.3	2.1	0.2	0	0.4	0.2	1.2	0.8	0.3	1	0.6	0.2	0.2	0.5	0.8	0.2	2
Max	8.6	7.9	8.2	9.2	8.7	8.9	9.2	9.7	11.6	14.6	13.7	11	10.9	11.1	11.4	10.2	10.4	8.7	8.6	10.1	8.6	9.8	8.9	9.1	8
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40 Serial Number: 0 Calibration Factor: 0.76171 m/s/mV Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

